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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named

Inventor:

Christopher Lee Berg et al.

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METHOD AND APPARATUS FOR

REPLACING KNEE-JOINT

Docket No.:

M81.12-0060

Group Art Unit: 3732

Examiner: A. Ramana

# REPLY BRIEF FOR APPELLANT

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 I HEREBY CERTIFY THAT THIS PAPER IS BEING SENT BY U.S. MAIL, FIRST CLASS, TO THE COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450, THIS

2nd DAY OF February, 2007

PATENT ATTORNEY

Sir:

This is responsive to an Examiner's Answer that was mailed on December 7, 2007.



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## STATUS OF THE CLAIMS

I.	Total number of claims in the application.		
		Claims in the application are:	1-22
II.	Status of all	the claims.	
	A.	Claims cancelled:	None
	B.	Claims withdrawn but not cancelled:	None
	C.	Claims pending:	1-22
	D.	Claims allowed:	1-8
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## **GROUNDS OF REJECTION TO BE REVIEWED**

- I. Whether claims 9-16 of the present application are unpatentable as being obvious over the combination of U.S. Patent No. 6,190,312 (hereinafter "the '312 patent") in view of U.S. Patent No. 5,964,698 hereinafter (hereinafter "the '698 patent") and U.S. Patent No. 4,813,401 (hereinafter "the '401 patent").
- II. Whether claim 19 of the present application is anticipated by U.S. Patent No.4,373,709 (hereinafter "the '709 patent").
- III. Whether claims 17 and 18 of the present application are unpatentable as being obvious by the '709 patent.

#### **ARGUMENT**

# I. Claims 9-16 Are Novel Over the Combination of the '312 Patent in view of the '698 Patent and the '401 Patent.

The Examiner erroneously rejected claims 9-16 as being obvious under 35 U.S.C. § 103(a) over the combination of the '312 patent in view of the '698 patent and the '401 patent. The Examiner improperly combined the '312 patent with the '698 patent and the '401 patent to allege that claims 9-16 are obvious as there is no teaching in either patent to suggest the combination. The only reason for combining the references is hindsight reconstruction which is improper.

The Examiner's Answer provided no motivation, teach or suggestion in any of the cited patents that would lead to the combination of references. Rather, the Examiner's Answer erroneously provides a conclusion without any support for making the allegation that claims 9-16 are obvious over the combination of the '312 patent in view of the '698 patent and the '401 patent. (See page 7, lines 3-7 of the Examiner's Answer).

The Examiner attempts to rely upon a passage in the '312 patent that the snap-on clips are attachable to either a conventional retractor frame or a variable geometry retractor frame. There is no disclosure as to what the inventor of the '312 patent considered to be a "conventional retractor frame." However, the '312 patent discloses that whether a conventional retractor frame or a variable retractor frame is utilized, it is to be applied to the surface of the patient's body. (See column 8, lines 11-14 and lines 27-29).

Therefore, the '312 patent only discloses a retractor frame that is positioned on the patient's body. There is no teaching in either the '312 patent or the '698 patent of utilizing a table mounted retractor support.

The '401 patent discloses a table mounted retractor support that supports retractors having hinged, rigid handles that do not hinder the surgeon's movement during the operation. (Col. 2, lines 31-35). The '401 patent also discloses a retractor holder that is easily movable to a new position on the retractor frame without having to disturb the position of the other retractor structures. (Col. 2, lines 42-45). There is no disclosure in the '401 patent of utilizing at least one retractor having a flexible portion that flexes sufficiently so that the tibia can

be moved during surgery without having to re-engage the retractors with the skin and flesh layers or to reattach the retractors to the retractor support or adjust the retractor support as claimed.

The above discussion shows that the claimed invention was used as a road map to allege that claim 9 is obvious, as there is no teaching, suggestion or motivation to make the combination of references. The mere fact that prior art can be modified does **not** make the modification obvious unless the prior art taught or suggested the desirability of the modification. *In re Gordon*, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). (emphasis added). Therefore, the obviousness rejection of claim 9 is improper and should be reversed.

The Office Action also rejected dependent claims 10-16 as being obvious over the '312 patent in view of the '401 patent and the '698 patent. Since claim 9 is in allowable form, claims 10-16, which depend from independent claim 9, are also in allowable form. Reversal of the obviousness rejection of claims 10-16 are respectfully requested.

#### II. Claim 19 is Novel and not Anticipated by the '709 Patent.

The Office Action erroneously rejected claim 19 as under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,373, 709 (hereinafter the '709 patent). The Examiner's Answer erroneously alleges that Whitt patent discloses an apparatus for securing a lower leg during surgery.

Applicants previously submitted Exhibits A, B and C in Applicants' Appeal Brief which proved that one skilled in the art would consider the lower leg to be the portion of the leg below the knee joint. The '709 patent does not disclose an apparatus for securing a lower leg during surgery. Rather, the '709 patent discloses securing the thigh of the patient. The thigh is above the knee and is not a portion of the lower leg as claimed.

The Examiner's Answer again ignores the stated purpose of the device disclosed in the '709 patent. The structure of the '709 patent has the "important advantage" of "arranging and holding the limb 35 over the edge (i.e. dangling over) of the operating table 37. This permits the joint to be flexed and fully bent as necessary during the operating procedures" (column 3, lines 17-22). A device that allows the lower leg to dangle over the edge of an operating table does not secure the lower leg as claimed.

Further, Applicants do not understand the statement that claim 19 neither structurally or functionally recites any limitations relating to access to the knee joint or permitting surgery thereon.

Claim 19 recites an apparatus to be used in securing a lower leg in knee surgery on a surgical table wherein the knee is disposed in an elevated position. "If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is 'necessary to give life, meaning, and vitality' to the claim, then the claim preamble should be construed as if in the balance of the claim." *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165-66 (Fed. Cir. 1999). MPEP § 2111.02. Applicants submit that the preamble gives meaning to the claim and should be considered as part of the claim.

Further, Applicants do not understand how the U-shaped structure disclosed in the '709 patent could be both positioned about the knee and have the strap attached to the ends of the structure to provide a downward force as claimed. If the U-shaped structure is positioned about the knee in a substantially vertical configuration as described in the '709 patent, then the strap will also engage the knee and not the lower leg as claimed. Further, with the strap engaging the top of the knee and the U-shaped structure obstructing access to the knee, a surgical procedure could not be performed on the knee, as claimed.

For the above reasons, the '709 patent does not disclose each and every element of claim 19. Therefore, claim 19 is not anticipated by the '709 patent, and the rejection should be reversed.

#### III. Claims 17 and 18 are Novel and Non-Obvious Over the '709 Patent.

Claim 17 was erroneously rejected under 35 U.S.C. § 103(a) as being obvious over the '709 patent. Applicants incorporate the arguments with respect to claim 19 into the arguments made with respect to claim 17. It should also be noted that the Examiner's Answer did not specifically address any of the arguments made with respect to claim 17 in Applicant's Appeal Brief.

It should also be noted that the Examiner's Answer ignored the statements in the '709 patent that teach away from utilizing the structure disclosed for supporting a lower leg which is below the knee. (See Exhibits A-C attached to Applicants' Appeal Brief). The joint (knee) could not be flexed and fully bent as necessary during the operating procedure discussed in the '709 patent. (column 3, lines 17-22). The structure of '709 has the "important advantage" of "arranging and holding the limb 35 over the edge (i.e. dangling over) of the operating table 37.

This permits the joint to be flexed and fully bent as necessary during the operating procedures" Id.

Further, the U-shaped support disclosed in the '709 patent provides the force that retains the thigh in an elevated position. The strap is utilized to retain the thigh within the Ushaped support. The strap is not necessary to retain the knee in the elevated position. The knee is retained in the elevated position with the upward force provided by the U-shaped support. The upward force is opposite of the downward force as claimed in claim 17.

For the forgoing reasons claim 17 is not made obvious by the '709 patent. Applicants respectfully request that the rejection be reversed.

Claims 18 depends from independent claim 17. Since claim 17 is in allowable form, claims 18 is also in allowable form. Applicants respectfully request that the rejection of claim 18 be reversed.

#### CONCLUSION

Applicants respectfully submit that claims 9-19 are allowable over the prior art. Applicants therefore request reversal of the rejections of claims 9-19.

Respectfully submitted,

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